

DOCUMENT RESUME

ED 312 945

HE 023 002

TITLE Prepaid College Tuition and Savings Bond Programs. A Staf Report. Commission Report 88-45.

INSTITUTION California State Postsecondary Education Commission, Sacramento.

PUB DATE Dec 88

NOTE 20p.

AVAILABLE FROM California Postsecondary Education Commission, Third Floor, 1020 Twelfth St., Sacramento, CA 95814-3985.

PUB TYPE Information Analyses (070) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Federal Government; Higher Education; *Money Management; National Surveys; *Program Effectiveness; State Programs; *Statewide Planning; Taxes; *Tuition

IDENTIFIERS California; Florida; Illinois; Internal Revenue Service; Michigan; North Carolina; North Dakota; Paying For College; *Savings Bonds; *Tuition Savings Plans; Washington; Wyoming

ABSTRACT

Information is presented on the three prepaid tuition programs and four college savings bond programs currently in operation in the United States, and the fiscal issues involved in their implementation are summarized. The three prepaid tuition programs are in Michigan, Wyoming, and Florida. The characteristics of the three programs are outlined and charted for comparison. These characteristics include: adoption date; implementation date; residence requirement; inclusion of tuition, mandatory fees, room, and board; publicity; status in relation to financial aid (exemption); restrictions on use; and total invested to date. Other states' interpretation of the federal tax ruling for Michigan's program are noted, and comparisons are made between California's institutional tuition and fees and its higher education enrollment, by institution type and size, and the same factors in the three states implementing prepaid tuition programs. The four savings bond programs examined are those of Illinois, North Carolina, North Dakota, and Washington. Similar characteristics are discussed for these programs, and similar enrollment and college cost comparisons are made between California and the four states. Conclusions are drawn about the risks, advantages, and problems associated with each program type and their appropriateness for California's situation. (MSE)

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Summary

At the June 1988 meeting of the Commission's Administration and Liaison Committee, staff summarized the prepaid college tuition and savings bond programs adopted by various states in the country and presented policy principles by which to assess the merits of similar proposals for California.

Since June, staff has gathered information from administrators of the three prepaid tuition and four savings bond programs in other states that have thus far been implemented. In anticipation of additional legislative action on proposals for California in 1989, staff presents information in this report on those programs -- prepaid tuition programs in Michigan, Wyoming, and Florida; and savings bond programs in Illinois, North Carolina, North Dakota, and Washington -- and discusses the implications of this information for California.

The Administration and Liaison Committee of the Commission discussed this report at its meeting on December 12, 1988. Additional copies of the report may be obtained from the Library of the Commission at (916) 322-8031. Questions about the substance of the report may be directed to Cathrine Castoreno of the Commission staff at (916) 322-8012.

PREPAID COLLEGE TUITION AND SAVINGS BOND PROGRAMS

*A Staff Report to the California
Postsecondary Education Commission*

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
Third Floor • 1020 Twelfth Street • Sacramento, California 95814-3985





**COMMISSION REPORT 88-45
PUBLISHED DECEMBER 1988**

THIS is one in a series of staff reports on important issues affecting California postsecondary education. These reports are brought to the California Postsecondary Education Commission for discussion rather than for action, and they represent the interpretation of the staff rather than the formal position of the Commission as expressed in its adopted resolutions and reports containing policy recommendations.

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OVER the last 20 years, the issue of assuring access to college has been discussed predominantly as a problem of low-income and underrepresented minority students. However, the growing inability of middle-income families to finance their children's college education has now broadened the discussion of access to include these students as well.

Increased tuition charged and decreased federal grant aid have forced middle-income families to depend heavily upon loans in order to finance a college education. According to the California Student Aid Commission, loans now account for over 50 percent of the financial aid resources available to California students, and students borrowed approximately \$700 million in the 1986-87 academic year. At private institutions, 66 percent of the undergraduate and 60 percent of the graduate students borrow, as do 47 percent of the undergraduate and 69 percent of the graduate students at public institutions.

The California Legislature has attempted to produce solutions to this problem by proposing a prepaid tuition program and a college savings bond program, on which Commission staff reported as a part of its Legislative Update for June 1988 (June Commission Item 2, pp. 4-10).

- Assemblyman Tom Hayden introduced legisla-

tion in the last two sessions that would create a prepaid tuition program. The Legislature passed his 1987 proposal (AB 278) on to the Governor at the end of the 1987 session, but the Governor vetoed it, citing potential risk to the General Fund and questioning the appropriateness of State involvement in helping families save for college. Assemblyman Hayden's 1988 bill (AB 3463) was retained in the Legislature.

- Senator John Seymour introduced a college savings bond proposal in the 1988 session (SB 2833) that evolved into a Samuel Farr bill (AB 2064), which the Governor vetoed for essentially the same reasons as the prepaid tuition proposal.

To date, nine states have authorized prepaid tuition programs, of which three have been implemented, and another 12 have adopted college savings programs, of which four have been implemented. A national audience of state policy makers is observing these programs, and the Commission staff expects interest in such programs to continue to grow in California.

In anticipation of future legislative discussions, this report provides an update of the three prepaid tuition programs and the four college savings bond programs currently in operation and summarizes the fiscal issues involved in their implementation.

NINE states have passed legislation adopting prepaid tuition guarantee programs. Michigan led the way in 1986; Florida, Indiana, Maine, Tennessee, and Wyoming approved their programs in 1987, and Missouri, Oklahoma and West Virginia enacted theirs during this last summer. Of these nine states, only Michigan, Wyoming, and Florida have implemented their programs.

Display 1 below shows the approval and implementation dates of these three programs, whether or not they allow only state residents to participate, and whether or not the program allows participants to pre-purchase tuition, mandatory fees, room, and board. It also indicates the use of publicity to promote the program, the status of investment in the program for financial need assessment, the existence of restrictions on the use of program benefits, and the amount of money each program has in the bank. As Display 1 shows, each of the three programs differs somewhat from the other.

Characteristics of the three programs

- Michigan passed legislation to create the Michigan Education Trust (MET) prepaid tuition program in December 1986. The trust is a non-governmental fund open only to Michigan residents that allows them to prepay tuition in two separate plans -- one for two-year public institutions, and the other for four year public institutions. Both plans permit participants to purchase one year of tuition up to a maximum of two or four years, depending on the institution chosen, and both allow participants to prepay tuition through either a lump sum or by installments. Each plan guarantees to cover the number of years of tuition pre-purchased when the beneficiary enters college, as long as the beneficiary is 18 years of age or older and enters a participating Michigan public institution.

MET opened its four-year institution plan to appli-

DISPLAY 1 *Summary Characteristics of Existing Prepaid Tuition Programs*

<u>Characteristic</u>	<u>Michigan</u>	<u>Wyoming</u>	<u>Florida</u>
Adoption Date	December 1986	February 1987	June 1987
Implementation Date	August 1988	August 1987	September 1988
Resident Requirement	Yes	No	Yes
Tuition Included	Yes	Yes	Yes
Mandatory Fees Included	Yes	Yes	Yes
Room Included	No	Yes	No
Board Included	No	Yes	No
Publicity	Yes	Yes	Yes
Financial Aid Status	Not exempt	Not exempt	Not exempt
Restrictions on Use	Yes	Yes	Yes
Total Invested	Not ascertained	\$2.5 million	Not ascertained

Source: California Postsecondary Education Commission staff analysis.

cants for the first time this past August and intends to open enrollment for the community college plan by the end of 1988. Applicants had to submit a \$25 fee between August 1 and August 5 in order to participate in the program, and in those five days, MET received 82,495 applications. Applicants had until November 30 to complete their applications and return their contracts with payments. So far MET administrators have not stated the amount of money received by the trust.

- Wyoming authorized its Advance Payment of Higher Education Costs (APHEC) program in February 1987 and has operated it for over a year. The deputy treasurer of the University of Wyoming's Board of Trustees administers it on an open-enrollment basis and has received 400 completed contracts with payments totaling \$2.5 million from people all over the world. The program has been growing at an average rate of 40 new contracts per month.

In addition to tuition, Wyoming's program allows for the pre-payment of mandatory fees, room, and board. The program provides plans for two-year institutions, four-year institutions, and a combination of two-year and four-year institutions. Purchasers pre-pay in semester increments with a single lump sum. Since Wyoming has no private institutions in its system of higher education, it guarantees to cover the plan at any institution in the state, if attendance occurs in accordance with the plan and in the year specified in the contract.

- Florida opened its program for enrollment this past September and is receiving an average of 200 applications per day for it. Participants in the Florida program may purchase plans only for beneficiaries who have been residents of the state for at least 12 months prior to the purchase of the plan. However, beneficiaries are not required to be Florida natives or to remain Florida residents after participants have purchased the plan.

Florida's program provides three plans that apply to its state universities, its community colleges, or both; but participants have to commit to purchasing either a full two years or four years of tuition, depending on the plan they choose. Participants may pre-purchase a dormitory room contract (but not a meal contract) for up to four years and may pay in a lump sum or through installments. The program guarantees to cover tuition and dormi-

tory costs for three years before and ten years after the enrollment date projected in the contract.

Clearly none of the three programs has been in operation long enough to fulfill a contract or to assess its potential success. Administrators of Michigan's program are prepared to fulfill its first contract in January 1989, but do not expect to begin regular pay-outs on contracts until spring of 1989. Florida is prepared to fulfill a contract before the end of 1989, but Wyoming's first contracts will not go into effect until Fall 1997.

Implementation questions

Before implementing their programs, states have had to attempt to answer three important fiscal questions: (1) What is the expected federal tax burden on the programs; (2) What is the risk to state general funds; and (3) What price should be charged for participating in the program?

What is the expected federal tax burden? -- Interpreting the IRS ruling

While the initial investment in prepaid tuition programs is not tax deductible, Michigan, Wyoming, and Florida have exempted from state taxation both gains realized while funds are in the hands of program administrators and the investment gains received by participants. All three states have expressed interest in making the program funds and the benefits received by the participants exempt from federal taxes as well. So far, only the Michigan program has received a tax ruling from the Internal Revenue Service (IRS). Many states either interested in or planning to implement a prepaid tuition program have assumed that the IRS ruling for Michigan is indicative of its view of all prepaid tuition programs; yet that ruling is very complex and allows for a variety of interpretations as shown in Display 2 on the opposite page.

Display 2 indicates first the statutory classification of program funds as either state funds or non-governmental trust funds -- and therefore not state funds. It then shows whether or not federal taxes must be paid on investment gains realized by the State program or non-governmental trust. All states interpret gains on the initial investment as subject to federal tax, and so the display shows the indi-

DISPLAY 2 Interpretations of the IRS Tax Ruling for Michigan's Program

<u>State</u>	<u>State Funds</u>	<u>Program Gains Subject to Federal Tax</u>	<u>Participant Responsible for Capital Appreciation Tax</u>	<u>Interpretation of Ruling</u>
Florida	Yes	No	Student	Not relevant
Maine	Yes	No	Student	Negative
Michigan	No	Yes	Student	Positive
Tennessee	No	Yes	Purchaser or student	Negative
Wyoming	Yes	No	Purchaser or student	Not relevant

Source: California Postsecondary Education Commission staff analysis.

vidual or individuals responsible for paying the capital appreciation tax based on the state's understanding of the IRS ruling. Finally, the display presents each state's interpretation of the ruling as it impacts on the implementation of its program.

Michigan interprets the ruling as saying that the purchaser will not have to pay federal taxes on the increase in the value of the initial investment. Michigan's reading of the ruling identifies the student as the party likely to have to pay federal taxes on the increase in the value of the initial investment, and identifies the trust fund investment gains as subject to federal taxes at the corporate tax rate of 34 percent. Nevertheless, Michigan views the ruling as positive, thereby allowing the state to implement the program in accordance with its statute. Program administrators have applied for private not-for-profit tax status.

Wyoming and Florida did not establish a separate, non-governmental fund in implementing their programs, as did Michigan, and so they do not construe the state's investment gains to be subject to federal taxes. However, both states expect that the increase in the value of the participants' initial investment will be subject to tax based on the Michigan IRS ruling.

Of the five states that have adopted but not implemented a prepaid tuition program, Maine and Tennessee do not intend to implement their programs because of their interpretation of the Michigan ruling. Both Maine's and Tennessee's statutes made program implementation contingent upon a favorable ruling, but Maine officials have concluded that students would have to pay taxes on the increased

value of the initial investment, and on this basis interpret the ruling as negative. Consequently, Maine is prohibited by statute from initiating its program and does not intend to apply for a ruling specific to its program.

Tennessee policy makers have also assumed that the potential tax burden on their program will parallel the Michigan ruling. Without concluding who will be responsible for paying the capital appreciation tax, they have decided that someone would be accountable for paying taxes on the increase in the value of the initial investment and that its non-governmental fund would be subject to a 34 percent tax rate. Based on these two interpretations of the ruling, Tennessee officials also view it as negative and doubt that their program could earn enough money to cover contracts after a 34 percent tax. Therefore, they plan to postpone implementation of Tennessee's program until 1990.

In the absence of a directly stated ruling, Florida, Maine, Michigan, Tennessee, and Wyoming have had to assume that their interpretations of the ruling are accurate in order to make decisions. However, the actual meaning of the ruling will remain uncertain until the IRS, through its actions, makes clear its intent.

What is the risk to state general funds?

The inability to accurately predict the price prepaid programs must charge today in order to cover the cost of higher education in the future with certainty creates risk for states. Since the states guarantee to cover the cost of tuition, they take over responsibility for financially managing family resources.

The challenge for the states is to make a fixed initial investment in education, minus tax, administrative and legal costs, equal to the actual cost of tuition at the time beneficiaries enter college. Because even the most sophisticated econometric model must use static assumptions regarding behavior and economic trends, these models cannot account for the unpredictable changes in behavior that make economics an imperfect science. Consequently, states may minimize the risk to their general fund when implementing a prepaid tuition program, but they cannot remove the risk. In choosing to implement their programs, Michigan, Wyoming, and Florida have decided to accept the risk associated with the program.

States can minimize the risk by using economic models for projecting the future price of education that involve assumptions based on past experience. Looking to past experience provides some insight into the rate of increase in the number of institutions and in the cost of education at various public and private institutions, the rate of return on an investment portfolio, the distribution of students among various institutions, and the age at which most students begin college. However, state officials have no historical experience with regard to assumptions that are directly related to the program itself -- for example, the long-run rate of participation and attrition, or the administrative and legal costs of implementing the programs. Such factors influence program costs and need to be covered by the price of participation. As a result, Michigan and Florida have hired economic experts to assist in establishing the assumptions for calculating their price of participation.

In addition to using experts to reduce the uncertainty of the program, Florida has also attempted to call upon self-fulfilling prophecy. Its Legislature establishes tuition in its public institutions and therefore controls the rate of increase in tuition costs. Florida's program administrators have calculated that tuition over the last 25 years increased at an annual rate of about 7 percent, and they have informed the Florida Legislature that this rate of increase would be used as an assumption in calculating the price of the program unless the Legislature expected to change its behavior. Consequently, Florida legislators now know that the success of the program and its fiscal liability to the state depend at least partially on the consistency of their own behavior.

Using experts and enlisting cooperation from state policy makers helps reduce projection errors, but no matter how diligently states work to price their programs accurately, their models will always involve error. For instance, this year Wyoming's tuition increased by 18 percent -- well above the expected rate of increase used in establishing the price of the program -- and the actual rate of increase for the next two years will also significantly exceed that expected rate. As a result, Wyoming administrators have adjusted their model to account for the actual changes in the cost of tuition, but their model is now much less reliable. Florida, which just opened its program this fall, has also had to compensate for a higher than expected increase in tuition.

What price should be charged for participating in the program?

Display 3 on the opposite page juxtaposes the annual price of tuition and fees at public and private institutions, the price of pre-purchasing all tuition for a two-year public institution, a four-year public institution or a combination of both for the year 2006, and the per-capita income for California, Florida, Michigan and Wyoming.

As Display 3 shows, the price of tuition and fees at a public institution varies little in Florida and Wyoming but widely in Michigan and California. Considerable difference also exists in attending public and private institutions in each state that has private institutions. Since the programs guarantee to cover the cost of education at only public institutions, they fall short of covering the cost of education in case students choose to attend a private institution.

Display 3 also shows differences in the price of public education between states. The average price of tuition and fees at community colleges, state universities, and research universities range between \$100 to \$857, \$769 to \$1,675, and \$778 to \$1,473, respectively. California charges the least of all four states for a community college or state university education. In fact, the average price of tuition and fees for public institution, in all three segments in California is half or less than half that at similar public institutions in Michigan.

Interestingly, the variation in the actual price of tuition and fees is not reflected in the price of participating in a prepaid tuition program. While Michigan's and Florida's public systems of higher educa-

DISPLAY 3 Average Price of Tuition and of Prepaid Programs in Four Selected States

	<u>California</u>	<u>Florida</u>	<u>Michigan</u>	<u>Wyoming</u>
Price of Tuition and Fees				
Public Institutions^a				
Community Colleges	\$ 100	\$ 578	\$ 857	\$ 547
State University	769	852	1,675	n/a
Research University	1,473	852	2,828	778
Private Institutions^b				
Two-Year College	4,655	n/a	3,648	n/a
Four-Year Institution	8,073	1,367	5,093	n/a
Price of Prepaid Tuition Plan^c				
Two-Year	No program	882	2,208	2,372
Four-Year	No program	3,796	6,756	6,393
Two-Year and Four-Year	No program	2,772	n/a	5,560
Per-Capita Income^d	17,821	15,584	15,393	12,709

a. From State Higher Education Executive Officers, *Focus on Price*. Denver, Colorado: State Higher Education Executive Officers, July 1988. Prices are for the 1987-88 academic year.

b. From *The Chronicle of Higher Education Almanac*, September 1, 1988. Prices apply to the 1986-87 academic year.

c. Prices of plans for beneficiaries expected to enter college in the year 2006.

d. From *Survey of Current Business*. Washington, D.C., U.S. Department of Commerce, 68:8, 1988, p. 30. Figures represent per capita income in 1987.

Source: California Postsecondary Education Commission.

tion have both research and state universities, they have chosen to aggregate the systems and charge the same price for each system for the purpose of the prepaid program. However, the actual cost of tuition at the two systems in Michigan differs by over \$1,000.

The similarity in the price of participation charged by Wyoming and Michigan also presents an inconsistency, since the current average price of tuition and fees at public institutions differs between the states. The similarity in the price of participation in Wyoming and Michigan also does not reflect differences in the demographics and higher education systems of each state, as shown in Display 4 on page 8. Michigan's population is over 18 times larger than Wyoming's; Wyoming's students have no choice but to attend a public institution if they remain in state; and Wyoming has only eight public institutions, compared to 44 in Michigan. In sum, Wyoming's size and the size of its public segment of higher education allows for less variation and therefore fewer

variables to account for in establishing the price of participation. Fewer variables translates into a smaller range of error that program administrators must prepare for financially. The smaller expected error, the difference in the current average prices of tuition and fees, and the difference in the cost of living as reflected by differences in per-capita income, indicates that the price of participation should also differ between Wyoming and Michigan.

Unless the combined effect of the forces that determine the cost of tuition in Michigan and Wyoming are very similar, the similarity in the prices they charge for participating in their programs may be the first indication of error in the model used to calculate the cost of participation by either one or both states.

In application, similarities and differences between states have no clear correlation with the similarities and differences in the price of participation. Consequently, meaningful extrapolations regarding the

DISPLAY 4 Population and Public and Private Segment Sizes by Institutions and Enrollment, Four Selected States

	<u>California</u>	<u>Florida</u>	<u>Michigan</u>	<u>Wyoming</u>
Total Population (in Thousands) ^a	27,663	12,023	9,200	490
Number of Institutions ^b				
Public	138	37	44	8
Accredited Private	161	52	47	0
Enrollment (in Thousands) ^b				
Public	1,526	385	446	24
Private Accredited	206	92	75	0

a. From Department of Commerce, Bureau of the Census, 1988.

b. From *The Chronicle of Higher Education Almanac*, September 1, 1988.

Source: California Postsecondary Education Commission.

feasibility of implementing a prepaid tuition program in California cannot be made by quick and simple comparisons to the states that have implemented the program.

In the case of projection errors, Michigan, Wyoming and Florida have options available to insure the fiscal solvency of their programs. Michigan and Wyoming are administratively prepared to charge future participants higher prices in order to compensate for under-charging participants who purchased a prepaid plan earlier, and all three states view going back to their legislatures to ask for more state funds to insure the fiscal solvency of their programs as an option. In fact, the statute creating the prepaid program in Florida explicitly states that the Legisla-

ture will provide sufficient funding to the prepaid program to insure its fiscal health.

In contrast, neither Tennessee nor Maine view using tax dollars as an acceptable means of insuring the solvency of the program. Tennessee policy makers have concluded that a prepaid program could not be administered without using state general fund dollars, and for this reason they will not pursue the implementation of its program. Both Tennessee and Maine are considering college savings bond programs -- the subject of the next section of this report -- as one means of providing assistance to families in preparing financial for college, but without risking state dollars.

3 *Avoiding Risk: Savings Bond Programs*

STATES can administer savings bond programs with fewer assumptions and less effort than guaranteed, prepaid tuition programs. In most cases, states already sell bonds, and so the administrative machinery already exists to implement the program. Moreover, program administrators base the value of the bonds on the expected rate of return received from the actual investment of bond revenues, not the expected cost of education at some future time. Therefore, states do not have to base the program on projections of the future price of tuition and so expose their general funds to little or no risk.

Although Illinois, North Carolina, North Dakota and Washington differ greatly in terms of the size of their populations and segments of higher education, as Display 5 below shows, their bond programs are very similar. The size of their population ranges from 627,000 in North Dakota to 11.6 million in Illinois. Illinois has the largest higher education system, with public and private accredited institutions totaling 163 and a combined enrollment at these institutions of 687,000. North Dakota has the smallest system with a total of 19 public and private

accredited institutions that served 37,500 students in the 1987-88 academic year. Display 6 on page 10 summarizes the savings bond programs implemented in the four states. It shows the date of the program's authorization, the first bond issues, the existence of a resident requirement for participation, whether or not the program was publicized, the status of the value of the bonds for financial need assessments, the imposition of use restrictions, and the total dollar value of bonds sold to date.

All four states provide zero coupon bonds as the mechanism for helping parents save money for a college education. Zero coupon bonds do not pay interest. Instead, purchasers receive gains on their initial investment at the time the bond matures. For example, a person who purchases a zero coupon bond with a ten-year maturation period today for \$2,500 would receive \$5,000 at the end of ten years. None of the four programs guarantees to cover the cost of education, nor does it impose use restrictions. Purchasers may use the bonds for any purpose and may use them to pay for either a public or private education in or out of the state.

DISPLAY 5 *Population and Public and Private Segment Sizes by Institutions and Enrollment, Five Selected States*

	<u>California</u>	<u>Illinois</u>	<u>North Carolina</u>	<u>North Dakota</u>	<u>Washington</u>
Total Population (in Thousands) ^a	27,663	11,582	6,413	627	4,538
Number of Institutions ^b					
Public	138	59	74	14	32
Accredited Private	161	104	51	5	20
Enrollment (in Thousands) ^b					
Public	1,526	531	263	35	212
Private Accredited	206	156	60	2.5	30

a. From Department of Commerce, Bureau of the Census, 1988.

b. From *The Chronicle of Higher Education Almanac*, September 1, 1988.

Source: California Postsecondary Education Commission.

DISPLAY 6 Summary Characteristics of Existing Savings Bond Programs

<u>Characteristic</u>	<u>Illinois</u>	<u>North Carolina</u>	<u>North Dakota</u>	<u>Washington</u>
Authorization Date	September 1987	July 1987	April 1988	February 1988
Implementation Date	January 1988	August 1987	June 1988	September 1988
Resident Requirement	No	No	No	Yes
Publicity	Yes	No	Yes	Yes
Financial Aid Status	\$25,000 exempt	Not exempt	Not exempt	Not exempt
Use Restrictions	No	No	No	No
Total Invested	\$315 million	\$36 million	\$15 million	\$50 million

Source: California Postsecondary Education Commission.

Characteristics of the four programs

While essentially similar, the programs have several distinguishing characteristics, as highlighted in the following summaries.

- The first state-sponsored savings program to issue bonds began in North Carolina in August 1987. Anyone may purchase North Carolina's bonds and use them for any purpose without penalty. The program involves no incentives to motivate educational use of the bonds, and program administrators have not actively publicized it. Nevertheless, the program sold its total issue of \$36 million. North Carolina decided to maximize the accessibility of the program by assuring that bonds would be available in denominations as low as \$125. Program administrators do not know the highest price of a bond sold under the program. The first bonds will mature in 1998.
- Illinois first issued bonds in January 1988. While its bonds may be used for any purpose without penalty, its program provides a coupon to be used to cover college costs to bond-holders who use the money received from the bond to pay for a college education. The program also exempts up to \$25,000 in bonds from financial need assessments as an additional incentive to using the bonds for education. State policy makers view this exemption as equitable, sensing that a loss in eligibility for financial aid resulting from savings in bonds unfairly penalized purchasers for responsibly planning for the future. The state has publicized its program and has sold a total of \$315 million in bonds, ranging in price from \$935 to \$3,500. Its first bonds will mature in 1992.
- North Dakota first issued bonds in June 1988. Its program provides additional bonus coupons to be used to cover college costs when bond-holders use the money received from the bond to pay for a college education. However, the program does not exempt investment in the program from financial need assessments. The state has sold \$15 million in bonds that range in price from \$1,950 to \$3,600. Its first bond matures in 1994.
- The Washington State program first issued bonds in September 1988, and its bonds may be used for any purpose without penalty. The program does not provide incentives to motivate educational use of the bonds, such as bonus coupons for educational purposes, and it does not exempt investment in the program from financial need assessments. The Washington State Legislature intended to open the program only to residents, but program administrators do not expect to be able to defend this policy if challenged. They have heavily publicized the program, resulting in the purchase of the total \$50 million in bonds authorized for this first issue. Residents purchased the bonds at prices ranging from \$1,107 to \$3,188. The earliest maturing bond in the Washington program will mature in 1995.

Implementation

Like prepaid tuition program administrators, savings bond program administrators are interested in making the gains from investment exempt from federal taxation, but they focus their attention on the availability and accessibility of their programs.

Tax burden

All four states have exempted the increase in the value of the bonds from state taxes and have made a commitment to invest the revenue received from the sale of the bonds in such a way as to make state investment gains exempt from federal taxes as well. Program administrators have little control over the federal tax status of investment gains realized by the purchaser or beneficiary but may be able to take advantage of a bill the President has recently signed (described below) that exempts from federal tax U.S. bonds used to fund higher education.

Unmet demand

A high level of public interest in the programs has resulted in the over subscription of bonds issued under the program in each state. While this unexhausted demand for the program provides a positive indication regarding the importance of the service, the programs have had difficulty meeting the demand for bonds. Because the states' ability to take on debt, rather than the demand for the bonds, dictates the number and amount of bond issues, states cannot simply issue more bonds in order to meet the demand. As noted above, Illinois, North Dakota, North Carolina, and Washington have sold \$315 million, \$15 million, \$36 million, and \$50 million, respectively. Illinois and North Carolina have each had 15 bond issues in an effort to accommodate the demand, but the demand for the bonds still outstrips the supply. For example, Illinois sold \$225 million in bonds in its last issue; however, the demand equaled \$400 million.

The interest in these programs is probably greater than expressed by the number of applications, since some families are simply priced out of participation. Holding the maturity value of a bond constant, the maturity date and the interest rate at the time of purchase dictate the price of the bond. Illinois, North Dakota, and Washington provide bonds that have a maturity value of \$5,000, and as shown in Display 7 on page 12, interested individuals need a

minimum of approximately \$1,000 in order to purchase a bond.

North Carolina tries to make the program accessible by offering bonds of lower maturity value, so that participants can purchase bonds in denominations as low as \$125. But at this low denomination, participants would have to purchase bonds on a frequent and regular basis over a period of time in order to save enough to cover the full cost of education at a four-year institution.

Display 7 presents the price of tuition and fees at public and private institutions, the price range of bonds and the per-capita income for California, Illinois, North Carolina, North Dakota, and Washington. Despite the variation in the price of tuition and fees and in the price of bonds, participants in each state must have the cash available to purchase enough bonds to pay for the future tuition and fees at the yet unknown institution of their children's choice.

Sophisticated beyond its audience

In savings bond programs, the risk remains with the participants. While bond purchasers are assured the value of their bond upon maturity, they are still responsible for continually assessing whether or not they have saved enough money to cover the cost of a college education at the time their children enter college. This exercise in financial management is just as challenging to parents as it is to the state if not more so. Many parents may not know what a bond is, not to mention the concepts and formulas required to make projections of education costs in the future and the necessary rate of investment and capital appreciation necessary to cover those costs, and they probably do not have the resources to pay an expert to manage their finances for them.

The U.S. savings bond program

President Reagan has signed a bill that, as of June 1991, will allow capital gains on U.S. bond investments to be exempt from federal taxes if they are used to pay for college expenses. For purchasers filing joint returns and earning less than \$60,000 in total gross income annually, 100 percent of the funds used to pay for college expenses will be exempt. The exemption phases out into fractions as income

DISPLAY 7 Price of Tuition and Fees and of Bonds, Five Selected States

	<u>California</u>	<u>Illinois</u>	<u>North Carolina</u>	<u>North Dakota</u>	<u>Washington</u>
Price of Tuition and Fees					
Public Institutions^a					
Community Colleges	\$ 100	\$ 815	\$ 225	\$1,208	\$ 759
State University	769	1,616	847	1,226	1,272
Research University	1,473	2,215	845	1,412	1,731
Private Institutions^b					
Two-Year	4,655	3,614	3,635	n/a	n/a
Four-Year	8,073	6,560	5,597	4,162	6,837
Price of Bonds					
Low	No program	935	125	1,950	1,107
High	No program	3,500	n/a	3,600	3,188
Per-Capita Income^c	17,821	16,442	13,314	13,004	15,599

a. From State Higher Education Executive Officers, *Focus on Price*. Denver, Colorado: State Higher Education Executive Officers, July '88. Prices are for the 1987-88 academic year.

b. From *The Chronicle of Higher Education Almanac*, September 1, 1988. Prices apply to the 1986-87 academic year.

c. From *Survey of Current Business*. Washington, D.C.; U.S. Department of Commerce, 68:8, 1988, p. 30. Figures represent per-capita income in 1987.

Source: California Postsecondary Education Commission.

increases up to \$90,000 in gross income. At \$90,000 gross income, purchasers are not allowed the exemption. Single taxpayers and heads of households earning \$40,000 or less may exclude the total value of bonds used to pay for college expenses. This exclu-

sion also phases out until none is allowable at \$55,000 per year.

The impact of the federal program on state-initiated programs is unknown, but states may view adoption of a prepaid tuition or savings bond program as less necessary because of the federal program.

The evidence presented in the previous pages can be summarized as follows:

1. Prepaid programs involve considerable financial risk to the state. The amount of risk depends on various factors, such as increases in the price of tuition, the net rate of participation and inflation, that policy makers and administrators do not have direct control over.
2. All three states implementing a prepaid tuition program consider using state dollars as an option for insuring program solvency.
3. Prepaid tuition program administrators, with the exception of Florida, plan to charge future participants higher prices as a means of compensating for under-charging participants in the past.
4. Because of the price of participation for both prepaid and savings bond programs, upper and middle-income families will be able to participate much more than lower-income families in the programs.
5. Demand for both the prepaid tuition and savings bond programs is great.
6. Savings bond programs present little or no risk to the state, because they leave responsibility for planning for the cost of education with the families.
7. The tax status of both the prepaid and savings bond programs involves varying amounts of uncertainty. Ultimately, the benefits derived from both programs are for private use, which creates ambiguity as to their IRS classification. Program administrators have attempted to reduce the uncertainty in order to make program decisions.
8. California differs from Florida, Michigan, and Wyoming in the price of tuition and fees at its public institutions, the size of its population, the number of its public institutions of higher education, and the number of students served. All of these differences should be considered before adopting a program in California.
9. The President has approved federal tax exemption for the educational use of U.S. savings bonds, and so there may be less need for state initiated programs.

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature.

Members of the Commission

The Commission consists of 15 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. The other six represent the major segments of postsecondary education in California.

As of December 1988, the Commissioners representing the general public are:

Mim Andelson, Los Angeles
C. Thomas Dean, Long Beach, *Chairperson*
Henry Der, San Francisco
Seymour M. Farber, M.D., San Francisco
Helen Z. Hansen, Long Beach
Lowell J. Paige, El Macero
Cruz Reynoso, Los Angeles, *Vice Chairperson*
Sharon N. Skog, Palo Alto
Stephen P. Teale, M.D., Modesto

Representatives of the segments are:

Yori Wada, San Francisco; appointed by the Regents of the University of California

Claudia H. Hampton, Los Angeles; appointed by the Trustees of the California State University

Borgny Baird, Long Beach; appointed by the Board of Governors of the California Community Colleges

Harry Wugalter, Thousand Oaks; appointed by the Council for Private Postsecondary Educational Institutions

Kenneth L. Peters, Tarzana; appointed by the California State Board of Education

James B. Jamieson, San Luis Obispo; appointed by California's independent colleges and universities

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including Community Colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory planning and coordinating body, the Commission does not administer or govern any institutions, nor does it approve, authorize, or accredit any of them. Instead, it cooperates with other State agencies and non-governmental groups that perform these functions, while operating as an independent board with its own staff and its own specific duties of evaluation, coordination, and planning.

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, the Commission's meetings are open to the public. Requests to address the Commission may be made by writing the Commission in advance or by submitting a request prior to the start of a meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its interim executive director, Kenneth B. O'Brien, who is appointed by the Commission.

The Commission publishes and distributes without charge some 40 to 50 reports each year on major issues confronting California postsecondary education. Recent reports are listed on the back cover.

Further information about the Commission, its meetings, its staff, and its publications may be obtained from the Commission offices at 1020 Twelfth Street, Third Floor, Sacramento, CA 98514; telephone (916) 445-7933.

Prepaid College Tuition and Savings Bond Programs

California Postsecondary Education Commission Report 88-45

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities. Additional copies may be obtained without charge from the Publications Office, California Postsecondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 95814-3985.

Recent reports of the Commission include:

88-27 Proposed Construction of Off-Campus Community College Centers in Western Riverside County: A Report to the Governor and Legislature in Response to a Request of the Riverside and Mt. San Jacinto Community College Districts for Capital Funds to Build Permanent Off-Campus Centers in Norco and Moreno Valley and South of Sun City (June 1988)

88-28 Annual Report on Program Review Activities, 1986-87: The Twelfth in a Series of Reports to the Legislature and the Governor on Program Review by Commission Staff and California's Public Colleges and Universities (June 1988)

88-29 Diversification of the Faculty and Staff in California Public Postsecondary Education from 1977 to 1987: The Fifth in the Commission's Series of Biennial Reports on Equal Employment Opportunity in California's Public Colleges and Universities (September 1988)

88-30 Supplemental Report on Academic Salaries, 1987-88: A Report to the Governor and Legislature in Response to Senate Concurrent Resolution No. 51 (1985) and Subsequent Postsecondary Salary Legislation (September 1988)

88-31 The Role of the California Postsecondary Education Commission in Achieving Educational Equity in California: The Report of the Commission's Special Committee on Educational Equity, Cruz Reynoso, *Chair* (September 1988)

88-32 A Comprehensive Student Information System, by John G. Harrison: A Report Prepared for the California Postsecondary Education Commission by the Wyndgate Group, Ltd. (September 1988)

88-33 Appropriations in the 1988-89 State Budget for the Public Segments of Higher Education: A Staff Report to the California Postsecondary Education Commission (September 1988)

88-34 Legislation Affecting Higher Education Enacted During the 1987-88 Session: A Staff Report to the California Postsecondary Education Commission (October 1988)

88-35 Meeting California's Adult Education Needs: Recommendations to the Legislature in Response to Supplemental Language in the 1988 Budget Act (October 1988)

88-36 Implementing a Comprehensive Student Information System in California: A Recommended Plan of Action (October 1988)

88-37 Proposed Establishment of San Jose State University's Tri-County Center in Salinas: A Report to the Governor and Legislature in Response to a Request by the California State University for Funds to Create an Off-Campus Center to Serve Monterey, San Benito, and Santa Cruz Counties (October 1988)

88-38 Progress in Implementing the Recommendations of the Commission's 1987 Report on Strengthening Transfer and Articulation: A Staff Report to the California Postsecondary Education Commission (October 1988)

88-39 Proposition 98 -- The Classroom Instruction Improvement and Accountability Act: A Staff Analysis for the California Postsecondary Education Commission (October 1988)

88-40 The Fourth Segment: Accredited Independent Postsecondary Education in California. The Fifth in a Series of Reports on the Financial Condition of California's Regionally Accredited Independent Colleges and Universities (December 1988)

88-41 Beyond Assessment: Enhancing the Learning and Development of California's Changing Student Population. A Report in Response to the Higher Education Talent Development Act of 1987 (Assembly Bill 2016; Chapter 1296, Statutes of 1987) (December 1988)

88-42 The Role of the Commission in Achieving Educational Equity: A Declaration of Policy (December 1988)

88-43 Education Needs of California Firms for Trade in Pacific Rim Markets: A Staff Report to the California Postsecondary Education Commission (December 1988)

88-44 Distribution of Revenue from Concurrent Enrollment at the California State University: A Report to the Legislature in Response to Supplemental Language to the 1988-89 Budget Act (December 1988)

88-45 Prepaid College Tuition and Savings Bond Programs: A Staff Report to the California Postsecondary Education Commission (December 1988)